MISSOURI BOTANICAL GARDEN
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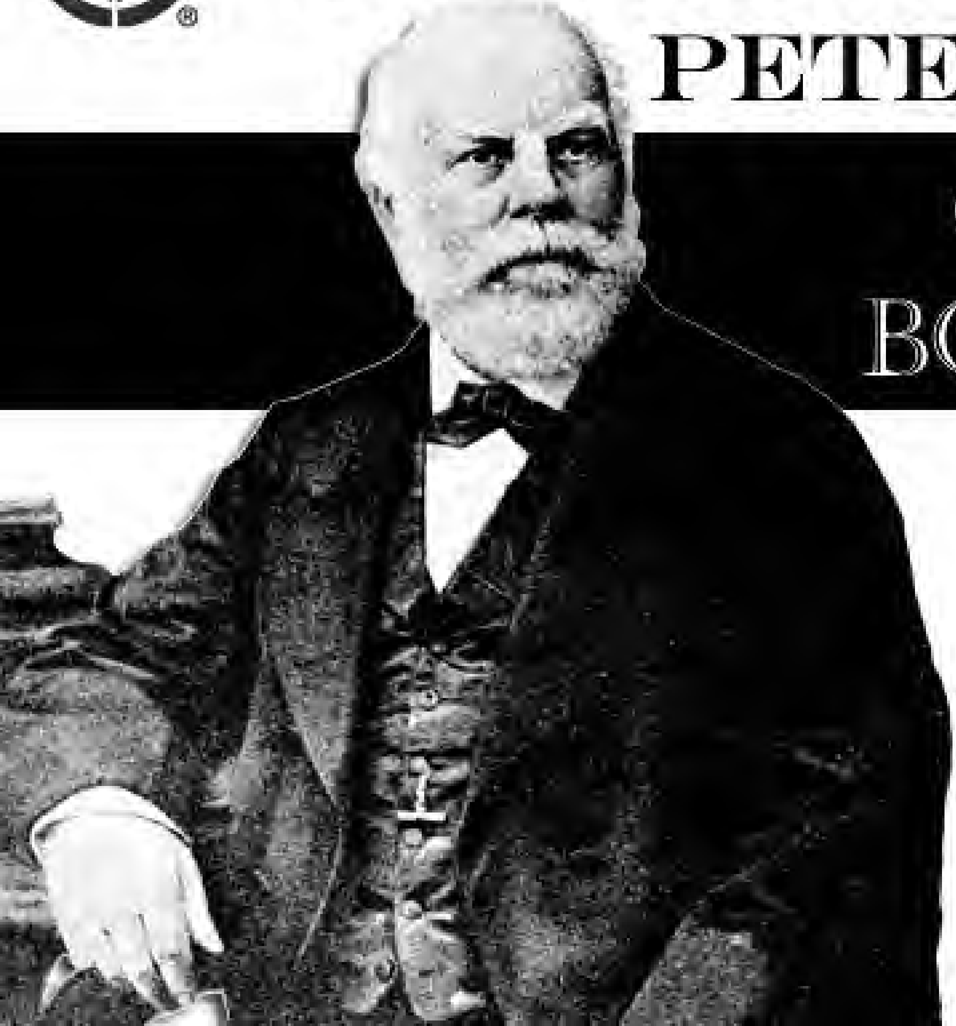

GEORGE ENGELMANN BOTANICAL NOTEBOOKS

Pagination Note:
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Cupressus Lawsoniana was first collected
1854 by William Murray, and his brother
Andrew Murray described it in Edinb.
New philos. journ., new series, April 1855

See Gard. Chron. Jan 7 1879

If Decaisne's Chamaecyparis Boursieri has terete
branchlets, as Carrière in ed 1. p. says, it
must be a Juniperus! but the description in Carrière
locality etc confounds probably Juniperus and Chamaecyparis
the latter grows in low damp soil and is a tree which can be
compared to Sequoia — the former grows on arid, high ground.

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10913

3, C. Lawsoniana: schönste Baum. Wird hier viel gezogen; sah ihn aber nur im wilden Zustande. Kommt nördlich vor, und geht durch Oregon durch. Scheint die feuchten Küsten und Abhänge zu lieben.

Bolander febr 9 1874

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Ihr
ergebenster
Henry N. Bolander

C. Loveniana sollte ich nun für (Dir) ein Varietät: zur

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lässt, während in andern Gegenden wie in der mittlern Schweiz, in Süddeutschland u. s. w. sich das Fehlen der *nemoralis* nur auf Detailkarten eintragen liesse. Um so entschiedener tritt dann am Südabhang der Alpen überall wieder *nemoralis* auf, während *hortensis* hier nur wenige Fundorte hat und bald ganz aufhört. Der Vortragende sah z. B. während einer italienischen Reise *H. hortensis* zum letztenmal bei Hohenems (Vorarlberg) und traf sie auf der Rückreise erst wieder in Besançon. Noch höher als *hortensis* steigt *silvatica;* wo sie vorkommt, z. B. in der französischen Schweiz und Savoien, haben wir drei Höhenstufen: *nemoralis* so weit der Weinbau reicht, *hortensis* im übrigen angebauten Land und bis in die Tannenwälder hinein, *silvatica* in diesen und darüber auf den Alpenwiesen über der Baumgränze, übrigens so dass *silvatica* auch noch in das Gebiet der *hortensis* und diese in das der *nemoralis* herabsteigt. Eine zweite geographische Modifizirung der oben angegebenen Gränzen beruht auf der klimatischen Bevorzugung der Westküsten, in Norwegen, Irland und Westfrankreich: während in Norwegen selbst noch um Christiania und von da längs der ganzen

1719.

Thujopsis borealis
Chamaecyparis Nutkaensis

während sie an der Ostseite Schwedens sonst nicht über Calmar hinaus bekannt ist, und selbst die Insel Öland nur *hortensis* hat (Westerlund).

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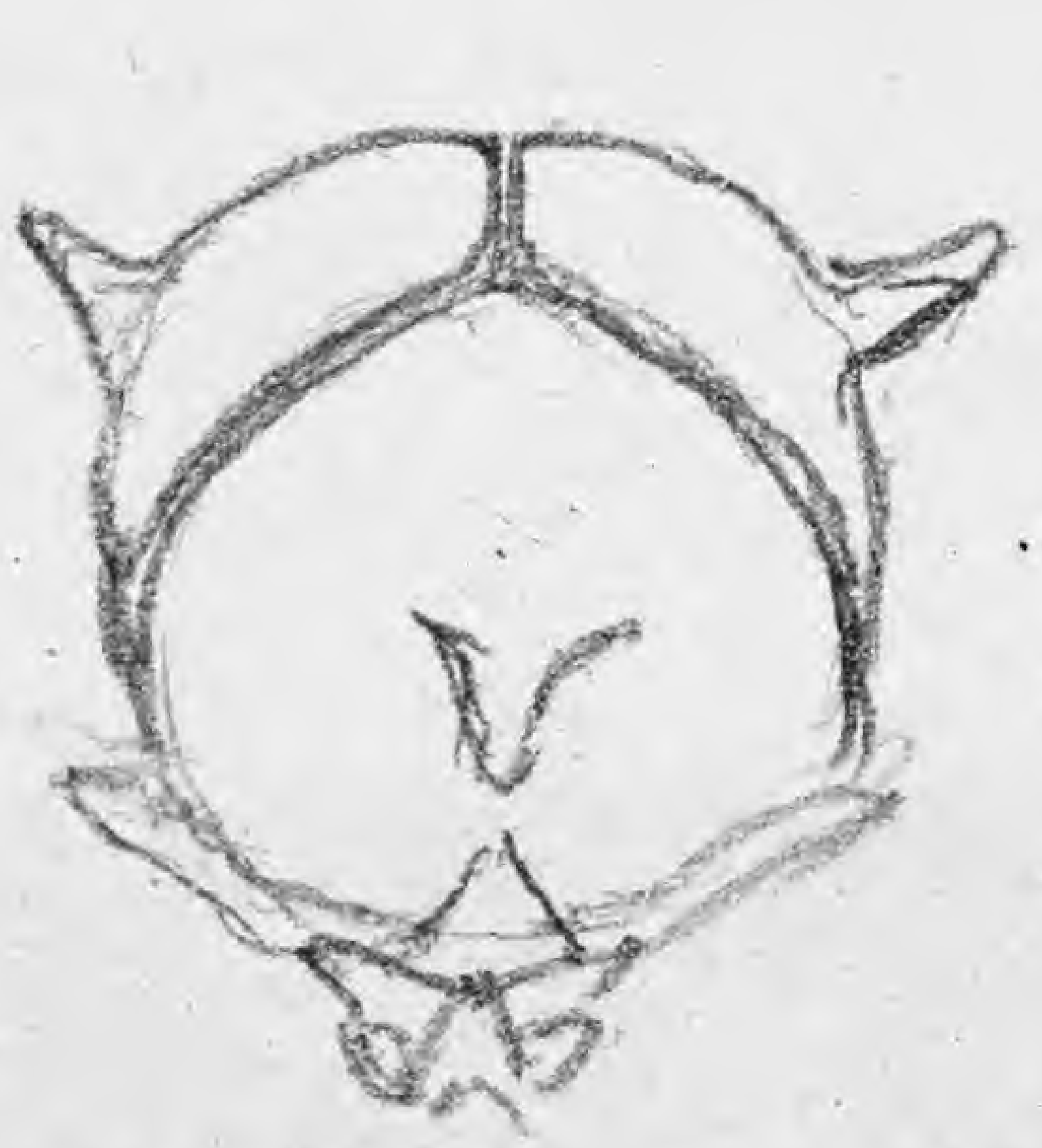
Helix hortensis gehört demnach dem nördlicheren und mittlern Europa an, sie erreicht wohl nirgens das Mittelmer, kommt ihm aber in Südfrankreich und am obern Winkel des adriatischen Meeres am nächsten; im Allgemeinen findet sie in den Alpen und Pyrenäen ihre Südgränze, weiter nach Osten in Croatien und Bosnien, dann nach Norden aufsteigend im nördlichen Ungarn, in Galizien und im mittlern Russland. Sie trifft mit allen andern Arten vielmals zusammen, in weiter Ausdehnung mit *nemoralis*, mit *Austriaca* namentlich in Böhmen, Galizien und Russland. *Helix nemoralis* gehört dem mittlern und südwestlichen Europa an, hier allein, dort mit den drei andern. Die Südgränze ist schon oben angegeben. Die Ostgränze findet sie schon in Croatien und jenseits der Theiss, wo sie noch von Grosswardein angeführt wird; nach Nordosten scheint sie sich aber weiter ausgedehnt zu haben, über Volhynien nach Kiew

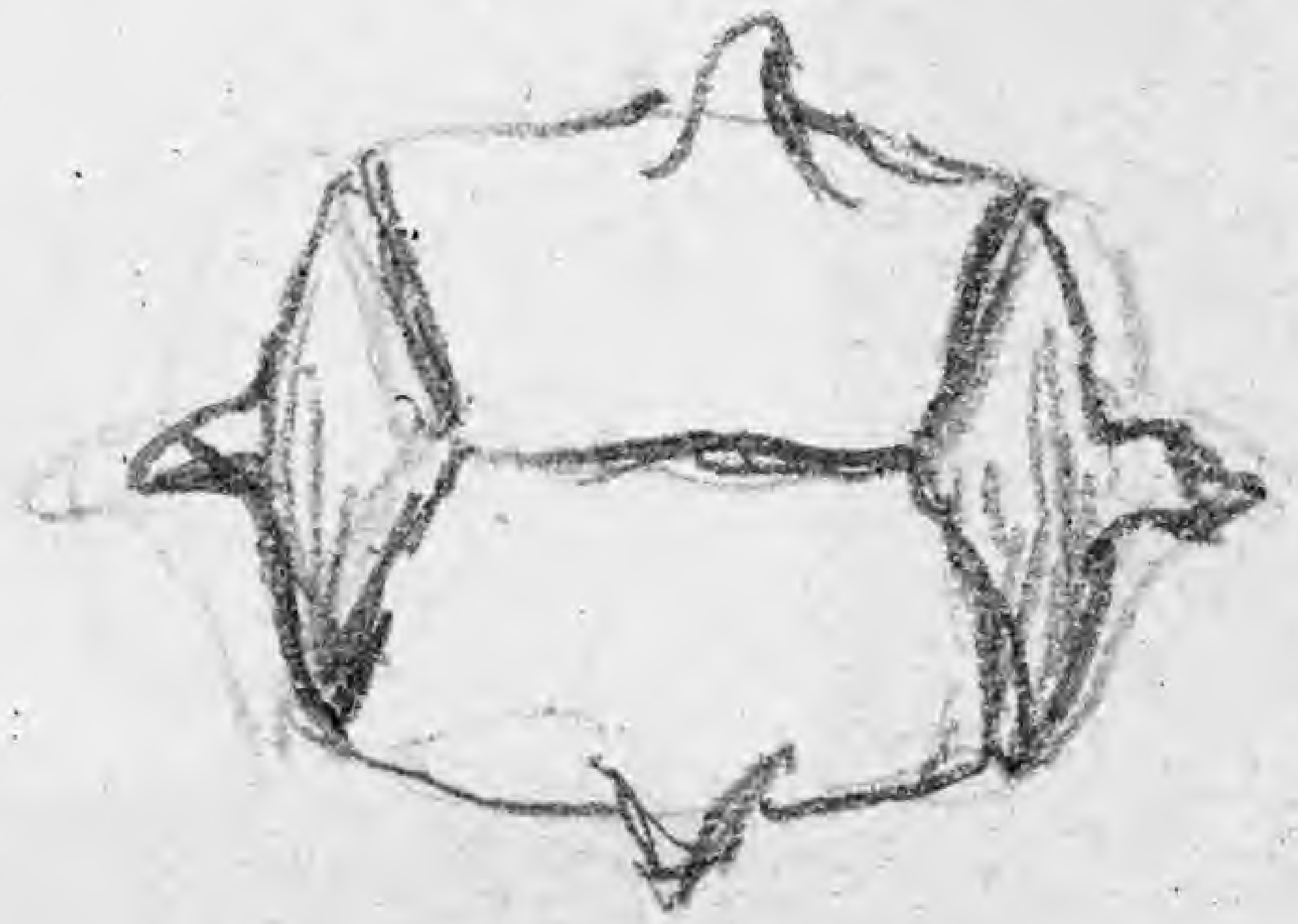
Thujopsis borealis

April 24 1874

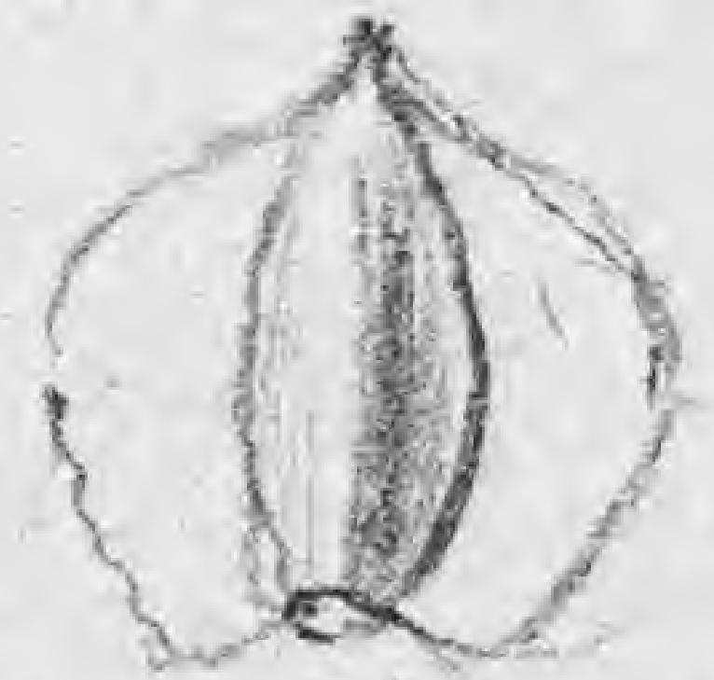
x 2



Fruit of 4 carpels

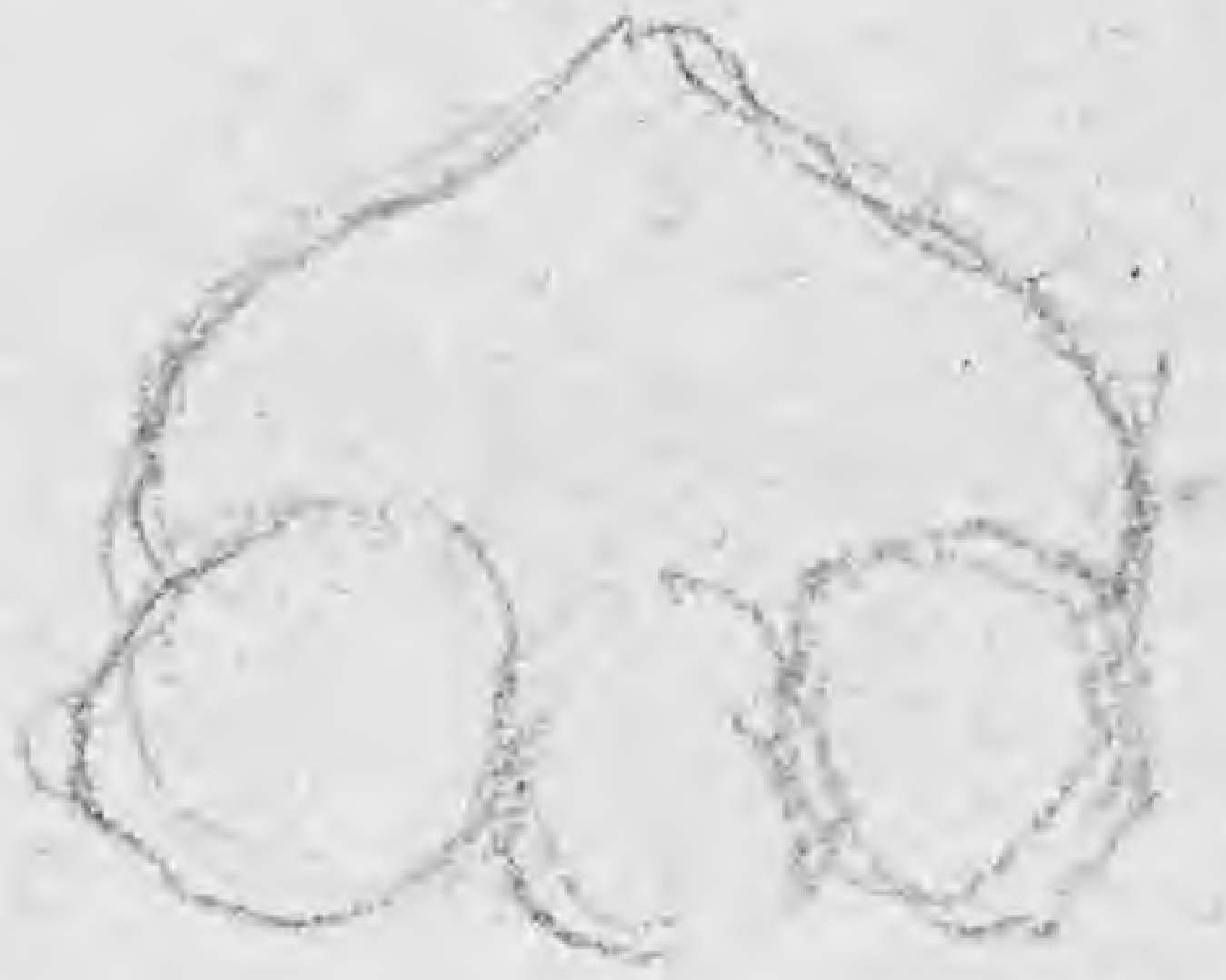


Top



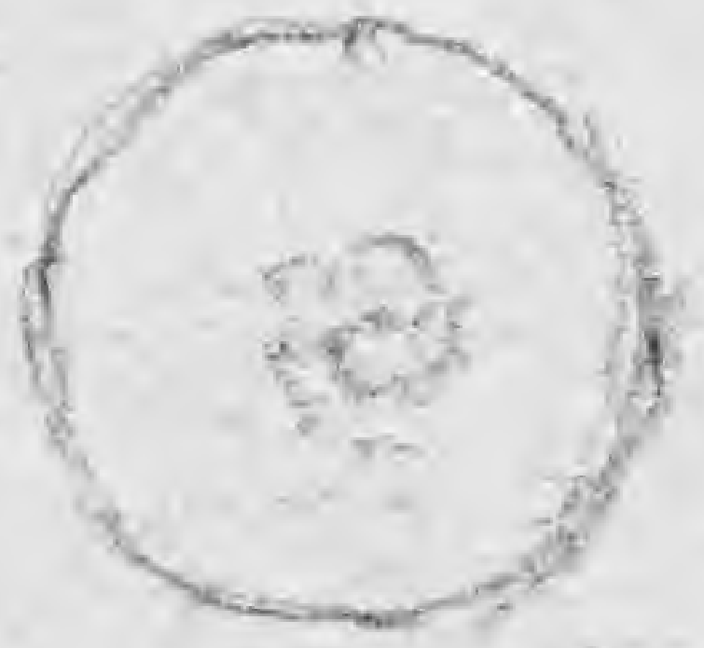
2 winged, 3 angular seed

apparently 3 in each scale
therefore 12 seeds, or a few less



x 10

2-3 anther cells



Pollen

x 415

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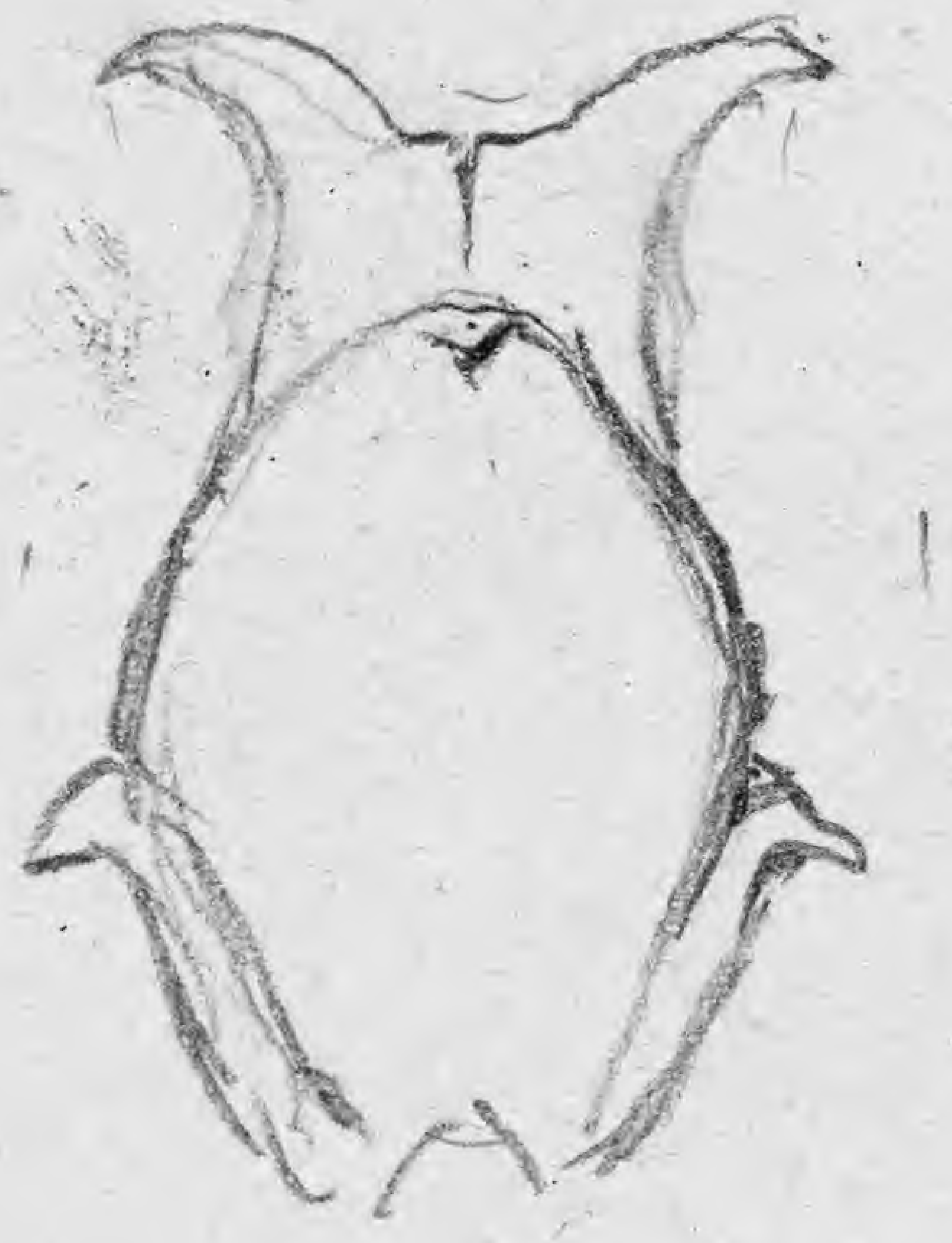
Biota orientalis pendula April 24. 1874

x 2



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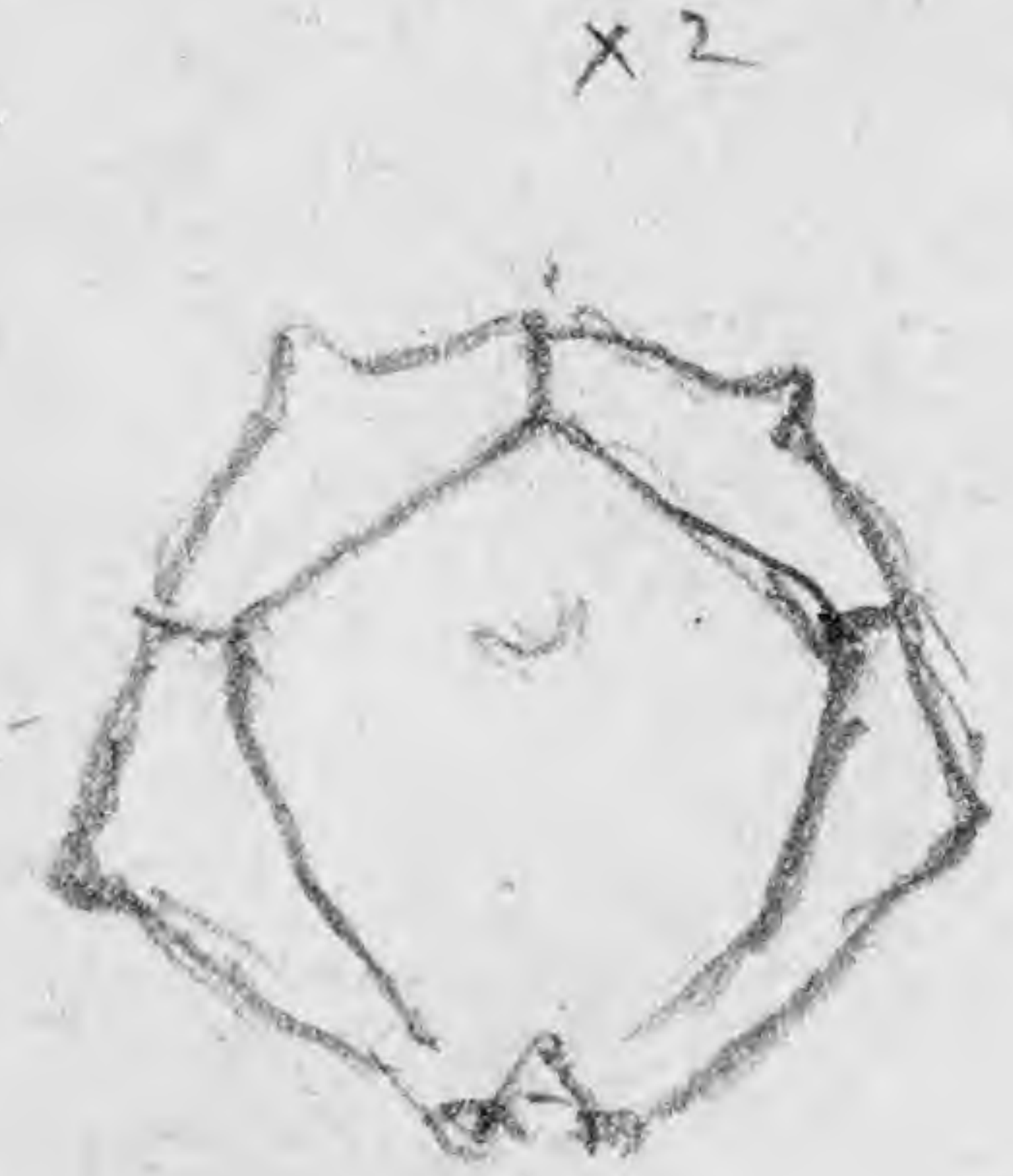
Biota orientalis aurea April 24 1874



6 rather equal
pair of scales

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CHEMIST

A

ALEX. LEITCH,

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ALL THE NEW REMEDIES CONSTANTLY ON HAND

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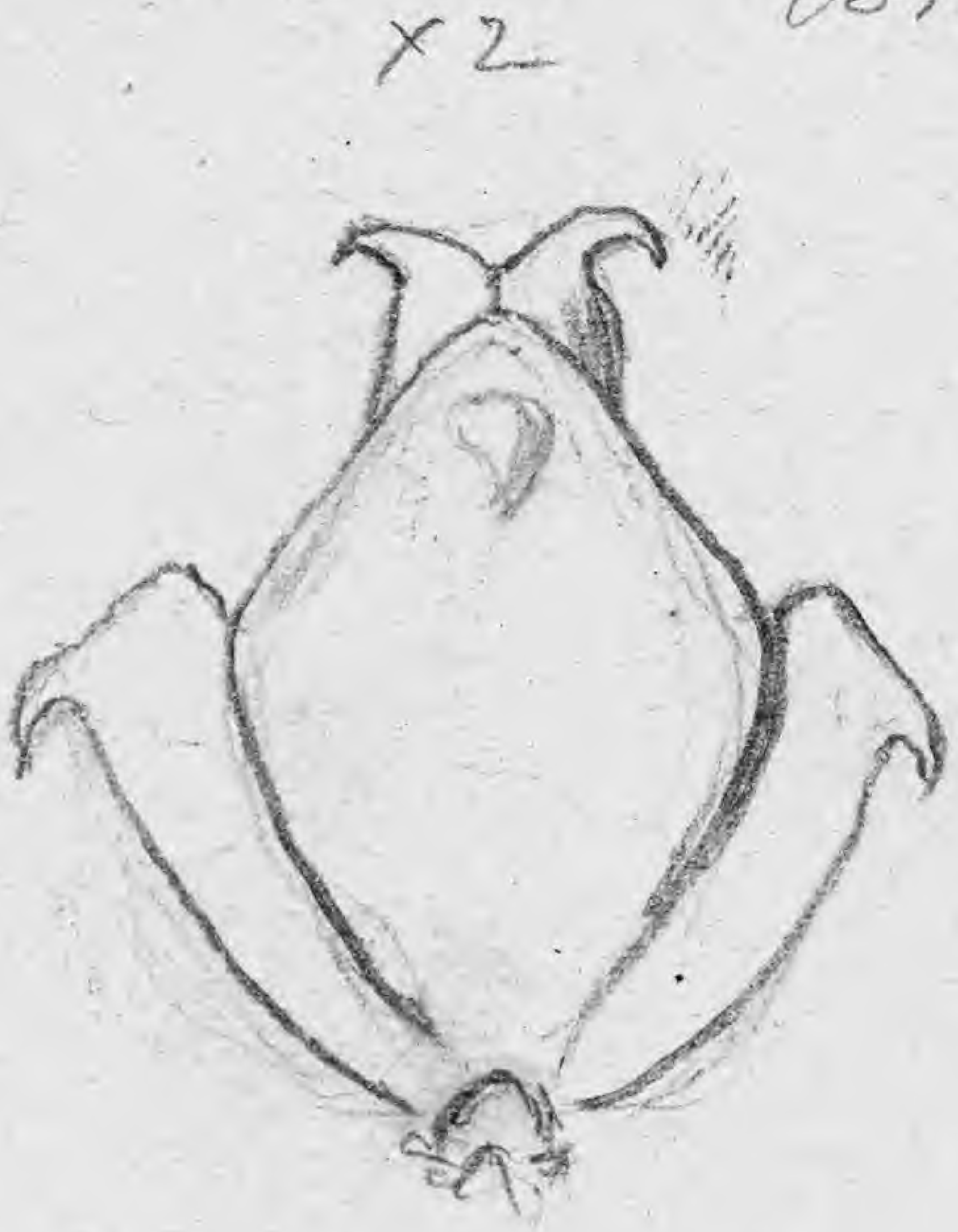
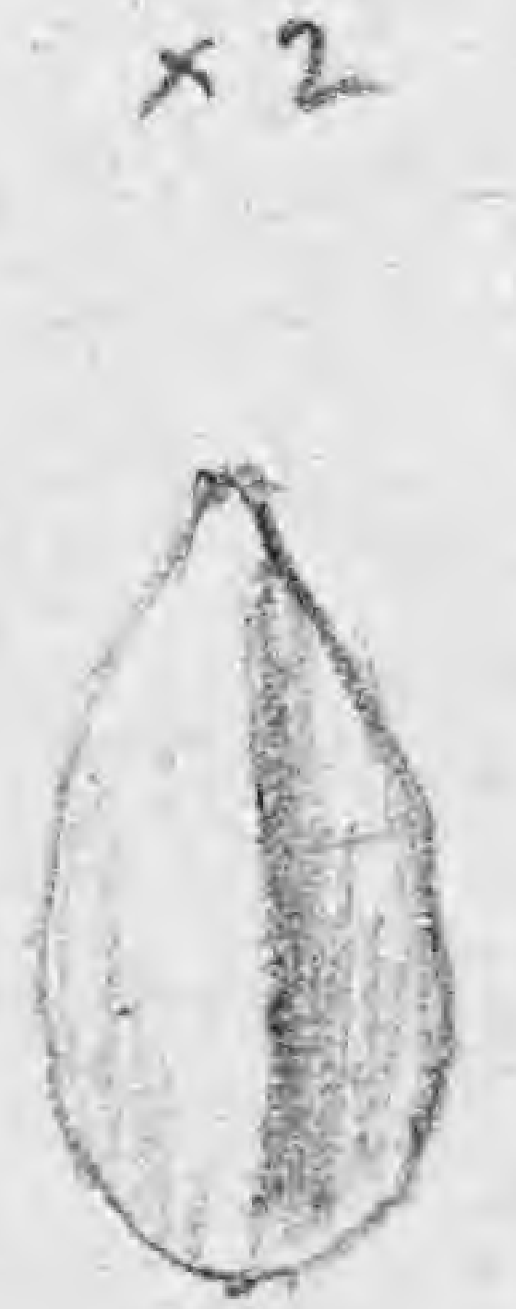
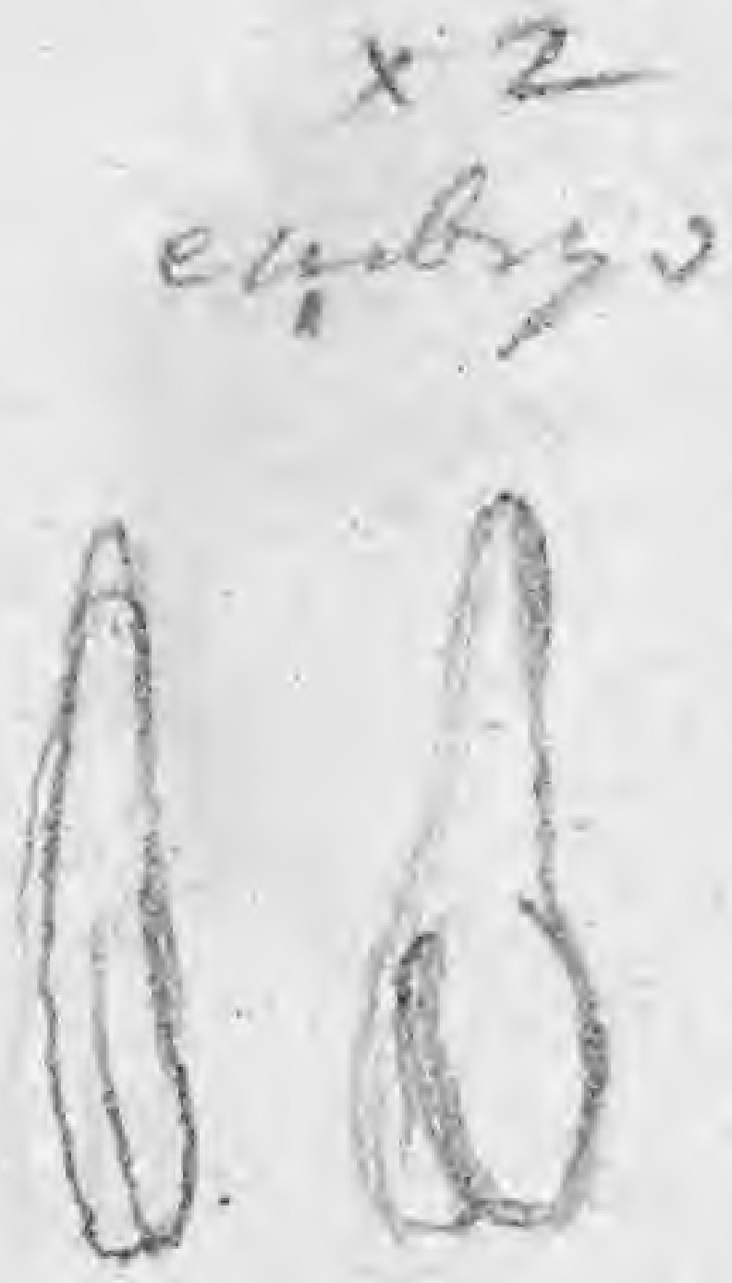
Biota orientalis April 24 1876



6 fruit scales
or carpels
lowest pair with 2 seeds
middle pair 1 seeded
inner pair sterile
therefore regularly
6 seeds



seeds in pairs



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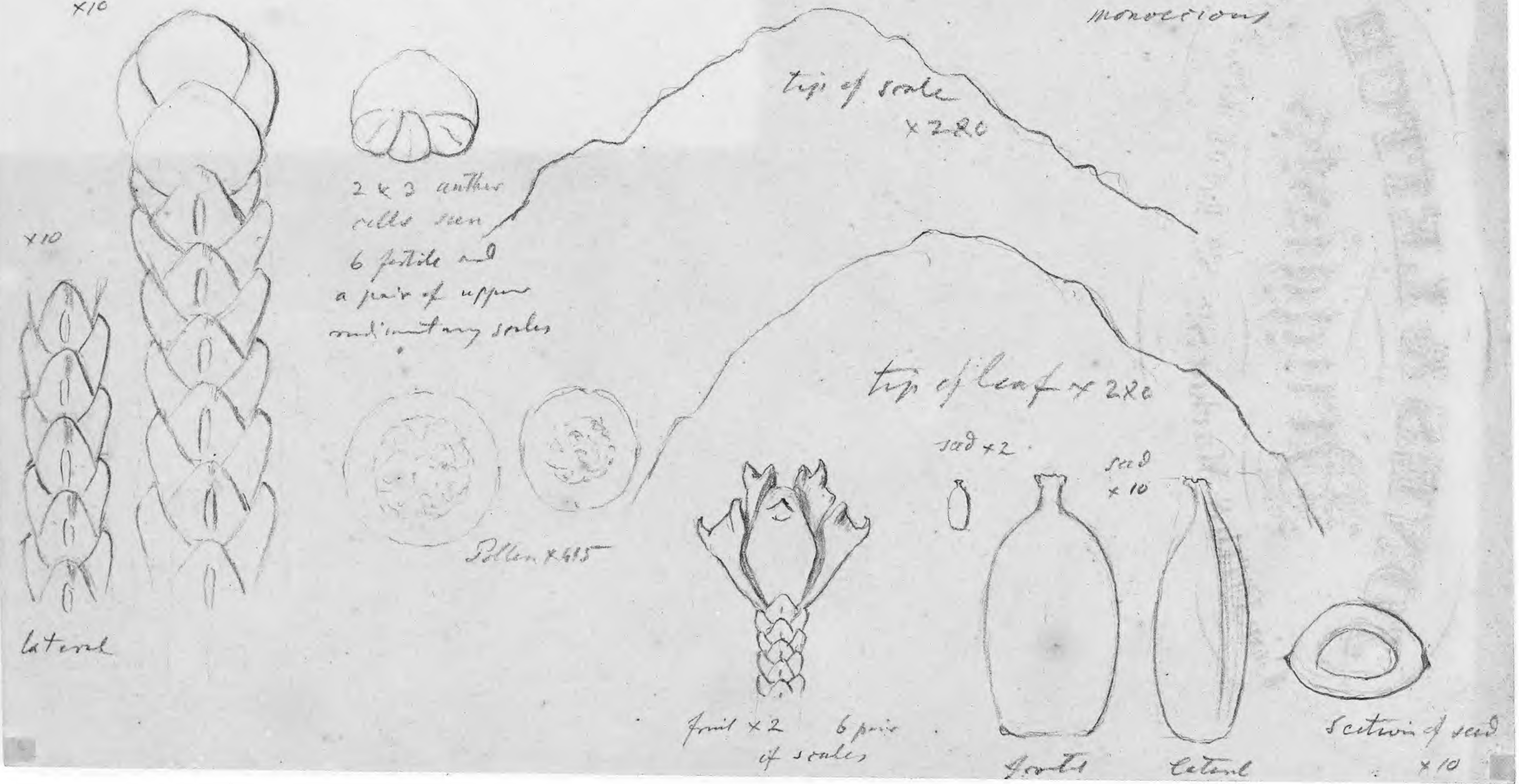
Biota orientalis var cult. ? April 8 1874

Mexico, Uhde No 77 = Herb. Berolin

monoecious



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Chamaecyparis Lawsoniana
240 inches circumference
2 inches sap wood, bark 9 inches thick
a large stump
another has sap 1½ inches 22 years
the heart wood next to sap, has
in 5¾ inches 50 years inner 4½ next 50
3½ following 50 years 5 inches
Tree 230 years old
40 inches diameter without bark
bark 3–4 inches. (Mertensiana purple)
wood of Lawsoniana is a powerful
hydragogue even the dust
of the saw mill to the mill
hands

[illegible] 13" dia 50–60' high

Di 10 [illegible] Olympia

11 feet [illegible]

[illegible] Cartorth

[illegible] 452 [illegible]

[illegible] castanopsis [illegible]

29 inch D

[illegible] Cartorth 66 x 26 feet

[illegible] 30 – 80 feet high

[illegible] 10 feet

[illegible]

[illegible] 20 [illegible] 16

[illegible] x [illegible]

Poly[illegible] [illegible] x [illegible]

[illegible] (single)

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GEORGE ENGELMANN PAPERS

Chamaecyparis Boursieri Decaisne

Ann Soc. Bot Fr. 1. 1854. p. 70

"(decouvert 1853 par Boursier de la Rivière)" fide Carrière p. 142

= Cupressus Lawsoniana ~~Decaisne~~ Murray

= Juniperus occidentalis fide Parlat.

fide Catal V. Houtte 1873-4

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In Pacific RR Report
Vol V appendix p 27. & 215
are poor sketches of Yucca brevifolia
showing flower stalks!!

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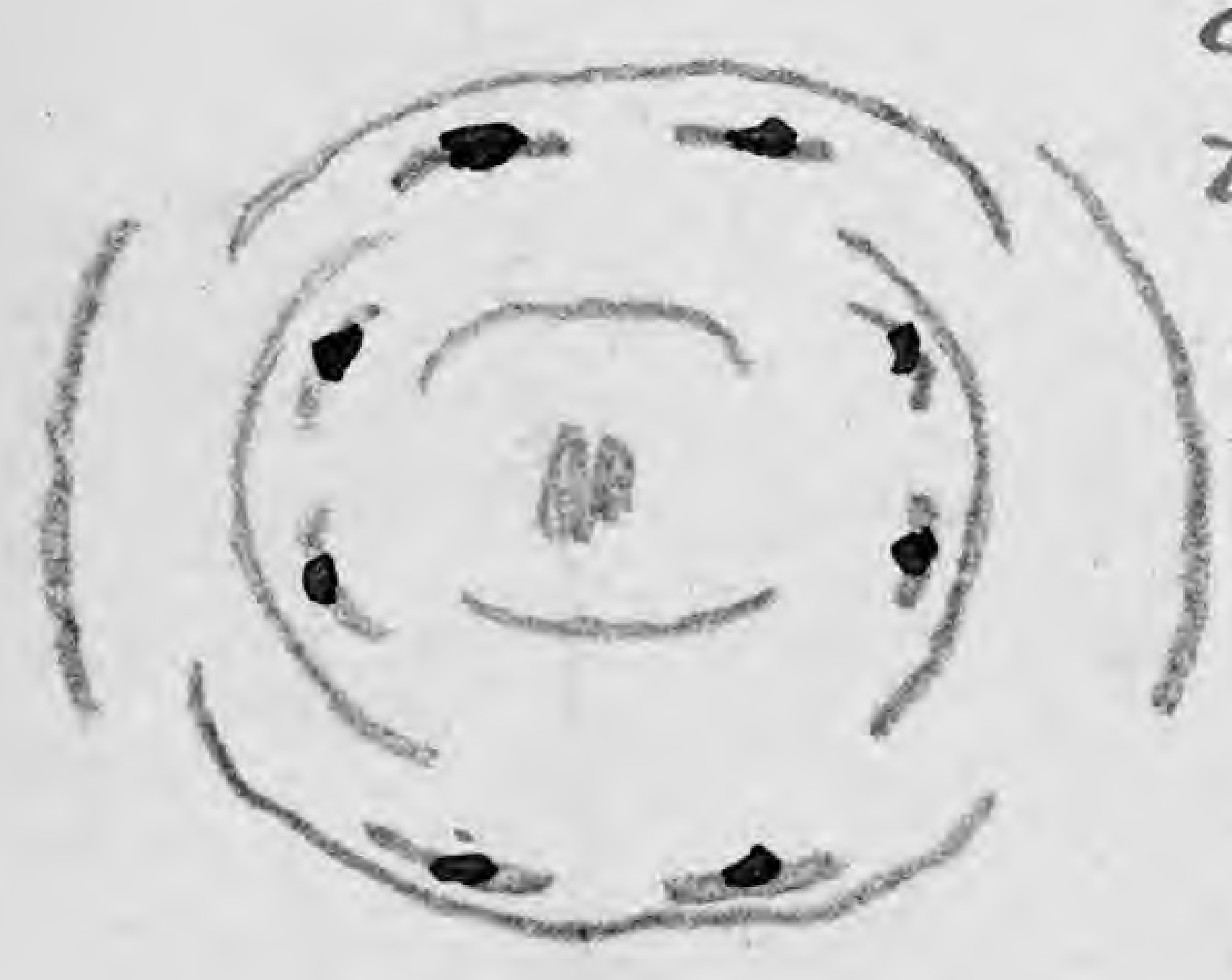
Thuja occidentalis
Minnesota

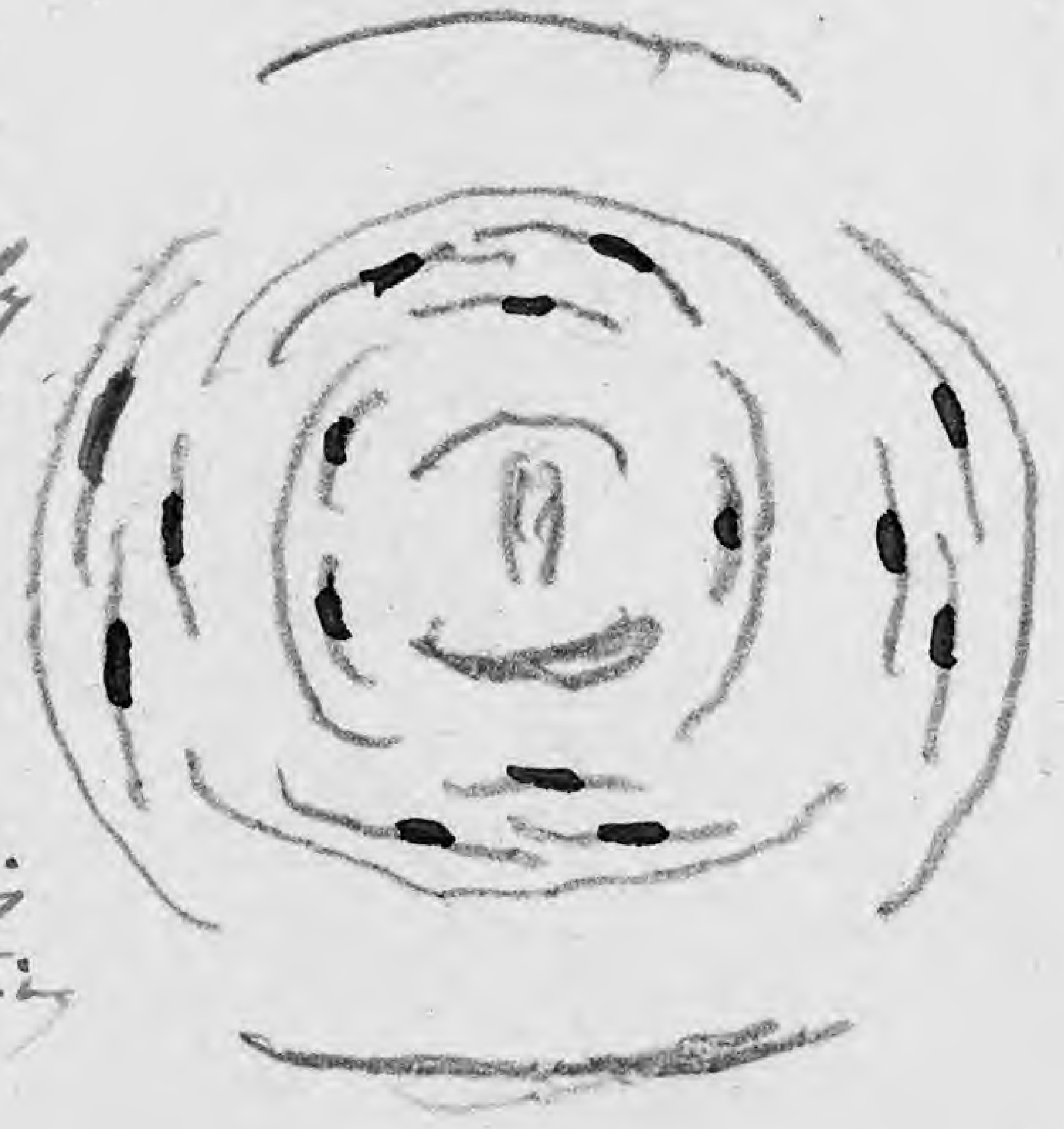
Thuja gigantea
Washington Terr.

Nov 9 1881



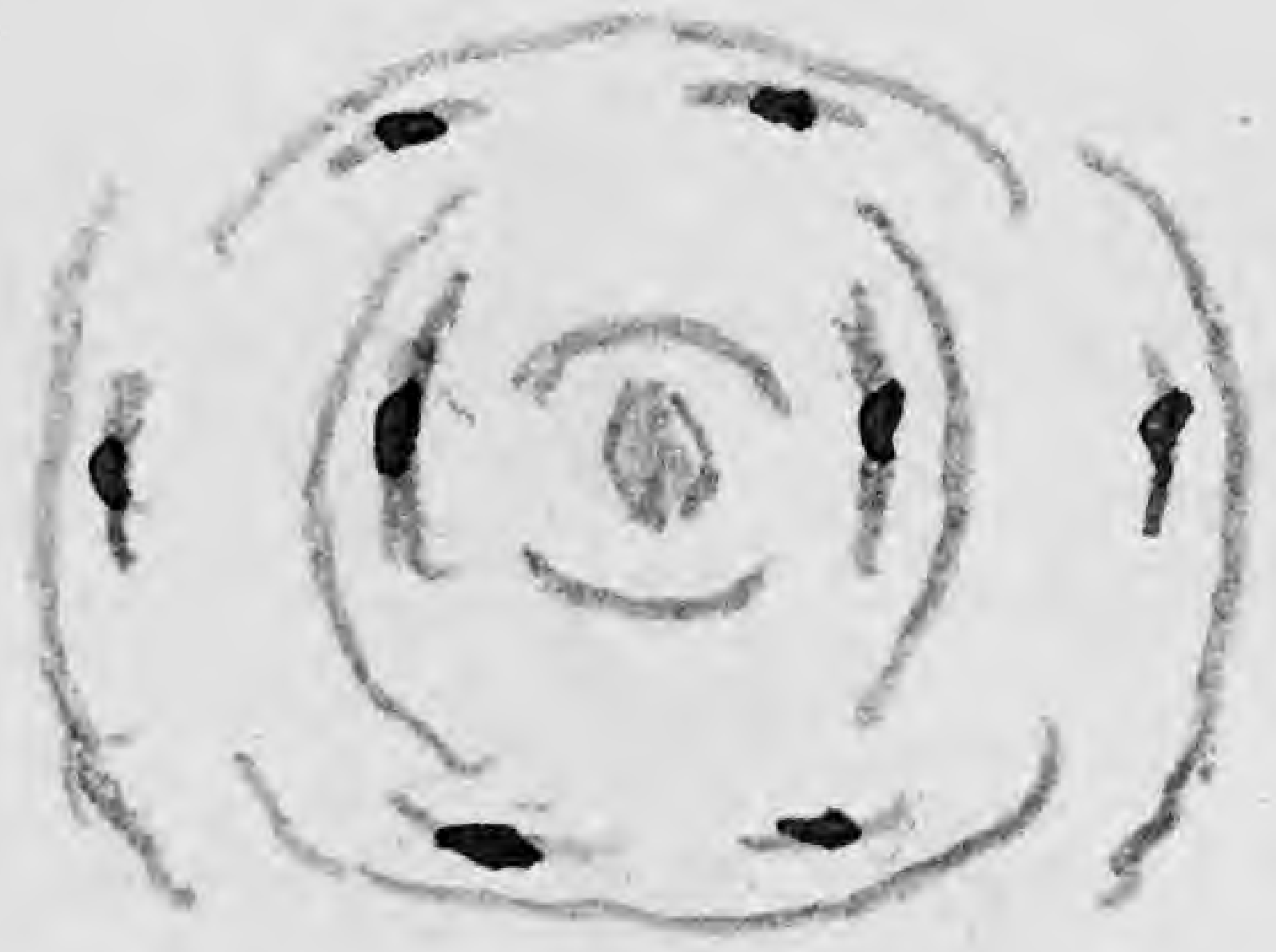
smaller
cones nearly smooth
tip minute, scarcely
below rounded end

scales usually
4 pair and
abortive one in
center, or this
latter wanting



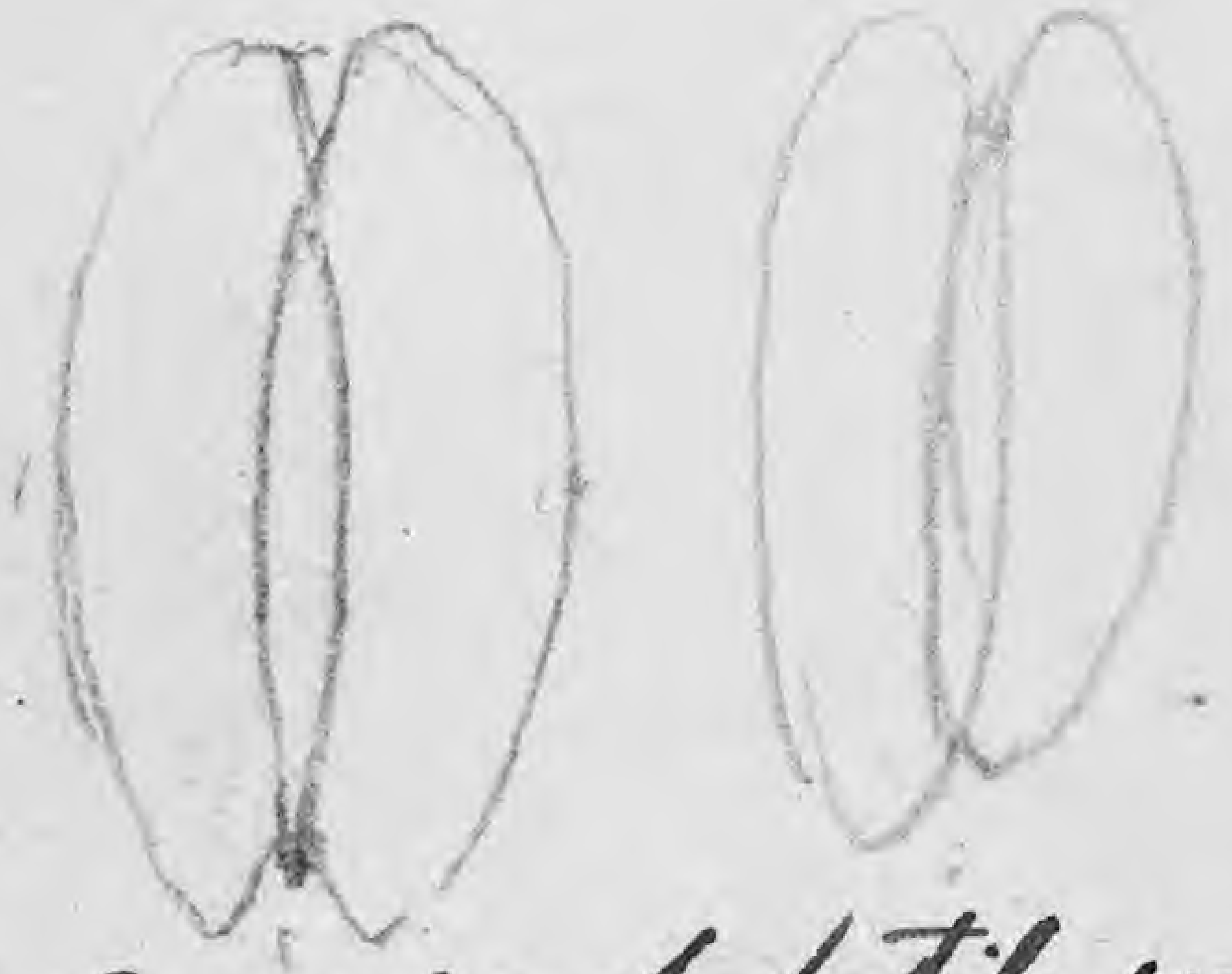
larger
cones squarrose,
scales triangular
tipped below the rounded
end

scales usually 5 pair
and abortive one in
center

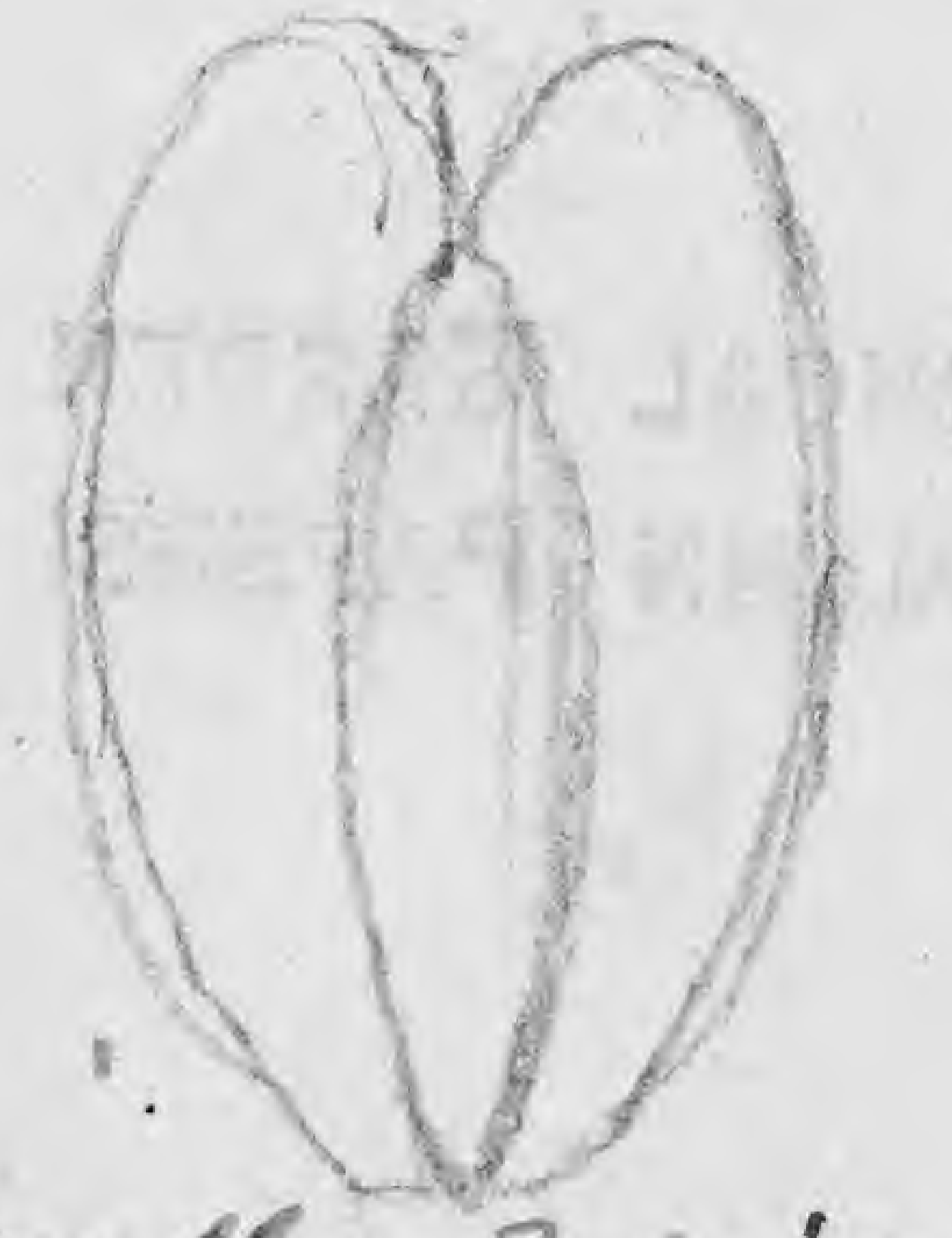


rare
exception

x 4



x4



usually 2 pair of fertile scales
2- or sometimes 1-seeded
seeds notched above and below,

usually 3 pair of fertile scales
3 or sometimes 2 or 1 seeded
seeds mostly notched only above, larger,

broadening

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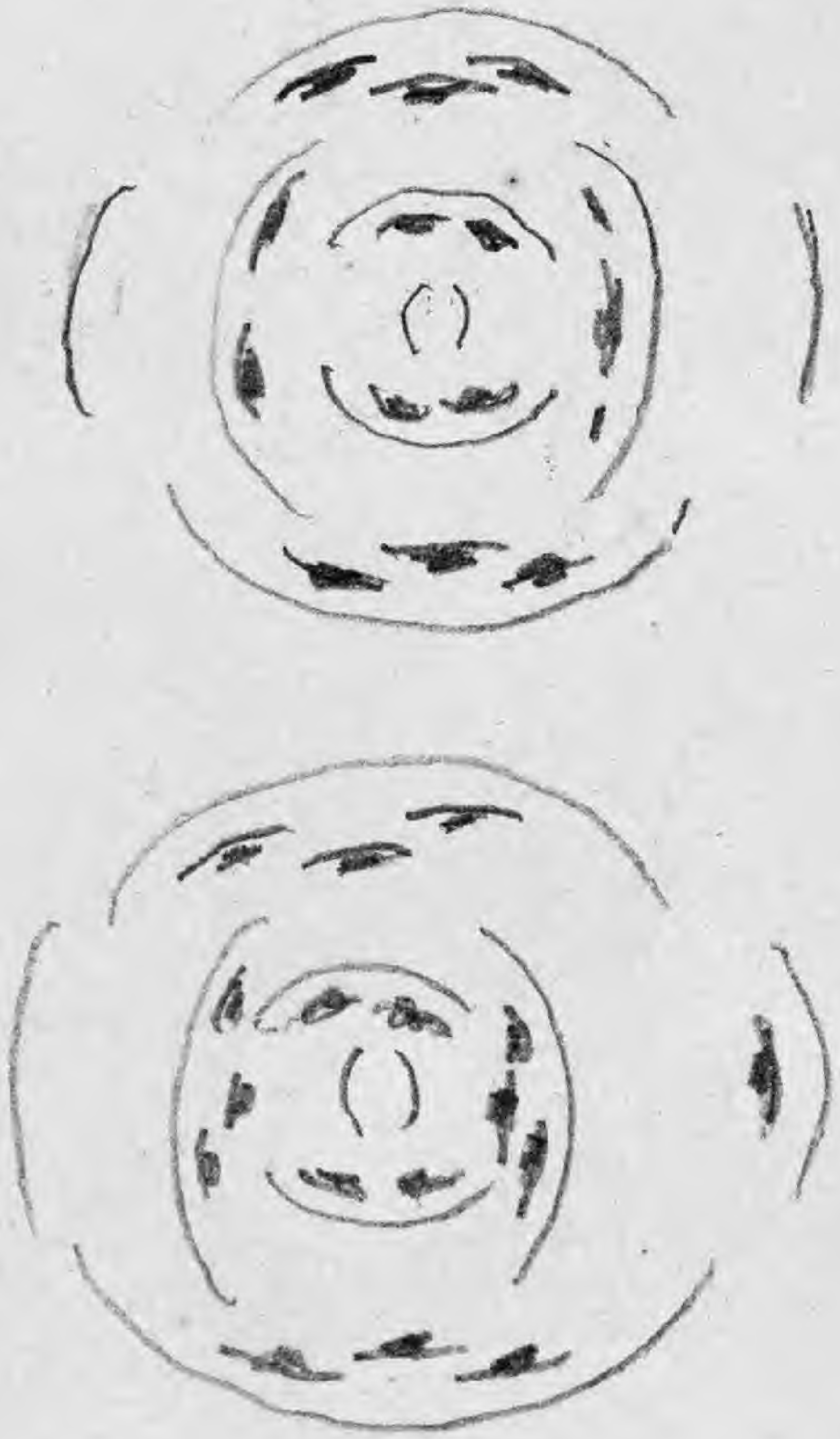
Thuya Standishii Carrière

cult Hort Hunnewell

Nov 20 1881



5 pair of scales
lowest mostly
upper always sterile

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Leitch & Corlies

DRUGGISTS

South West
Corner Fifth
and Market
Streets

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1725-8

Biota

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Bio

The Western,

A Review of

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Biota

1725-8

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1715-22

Chamaecyparis
Thujopsis

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V[illegible]ca herbacea Kit
pumila Clark.

10927

Spr I, 638

Hungar. Transsylv. Thraciâ.

H. Salzwed 1824

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1723-4

Thuja

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